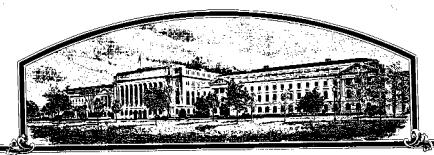
Atlest:

Agricultural Marketing Service



7500081

THE UNIVERD SHAVES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COMES

Agripro, Incorporated

Cultureus, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SEVENTERN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'CFS 2000'

In Testimony Waterest, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this fifth day of March in the year of our Lord one thousand nine hundred and seventy-six

Earl L Buty

Secretary of Agriculture

(DATE)

FORM APPROVED OMB NO. 40-R3712

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

	2. KIND NAME	2. KIND NAME		FOR OFFICIAL USE ONLY				
DESIGNATION			PV NUMBER					
CFS 2000	Soybean		7	500981				
3. GENUS AND SPECIES NAME	4. FAMILY NAME (Bot	anical)	FILING DATE 4.15.7.	TIME 8 A.M.				
<u>Glycine</u> <u>max</u>	Gramine		FEE RECEIVED	BALANCE DUE				
· · · · · · · · · · · · · · · · · · ·	5. DATE OF DETERM	INATION	5 d 50	\$				
	1072		\$ <u>~350</u>	_ \$_ 				
	1973	· · · · · · · · · · · · · · · · · · ·	\$ 250	8. TELEPHONE AREA				
6. NAME OF APPLICANT(S)	7. ADDRESS (Street at Code)	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)						
AGRIPRO, INC.	= -	P. O. Box 1668 Ames, Iowa 50010						
9. IF THE NAMED APPLICANT IS NOT A ORGANIZATION: (Corporation, partners.		10. STATE OF INC	ORPORATION	11. DATE OF INCOR- PORATION				
Corporation		Iowa	•	1973				
Ames,	Iowa 50010							
13. CHECK BOX BELOW FOR EACH ATT. X 13A. Exhibit A, Origin and B X 13B. Exhibit B, Botanical D X 13C. Exhibit C, Objective De	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet	у	tion 52 of the Plan	t Variety Protection Act.)				
13. CHECK BOX BELOW FOR EACH ATT 13. CHECK BOX	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty the Basis of Applicant	y 's Ownership						
13. CHECK BOX BELOW FOR EACH ATT X 13A. Exhibit A, Origin and B X 13B. Exhibit B, Botanical D X 13C. Exhibit C, Objective De X 13C. Exhibit D, Data Indicate X 13E. Exhibit E, Statement of 14A. Does the applicant(s) specify (See Section 83(a), (If "Yes,") 14B. Does the applicant(s) specify	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty the Basis of Applicant that seed of this variety answer 14B and 14C be that this variety be	y 's Ownership be sold by varielow.)	ety name only as a YES X to 14B, how many p	class of certified seed?				
13. CHECK BOX BELOW FOR EACH ATT 13. CHECK BOX BELOW FOR EACH ATT 13. Iso. Exhibit A, Origin and B 13. Iso. Exhibit B, Botanical D 13. Iso. Exhibit C, Objective D 13. Iso. Exhibit D, Data Indicat 13. Iso. Exhibit E, Statement of 14. Does the applicant(s) specify (See Section 83(a), (If "Yes," 14. Does the applicant(s) specify limited as to number of general	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty the Basis of Applicant that seed of this variety answer 14B and 14C be that this variety be tions?	's Ownership be sold by varielow.) 14C. If 'Yes,' beyond bre	ety name only as a YES to 14B, how many peder seed?	class of certified seed? NO generations of production ERED				
13. CHECK BOX BELOW FOR EACH ATT X 13A. Exhibit A, Origin and B X 13B. Exhibit B, Botanical D X 13C. Exhibit C, Objective De X 13C. Exhibit D, Data Indicate X 13E. Exhibit E, Statement of 14A. Does the applicant(s) specify (See Section 83(a), (If "Yes,") 14B. Does the applicant(s) specify	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty the Basis of Applicant that seed of this variety answer 14B and 14C be that this variety be tions? YES NO	y 's Ownership be sold by varielow.) 14C. If "Yes," beyond bre FOUNDA	ety name only as a YES to 14B, how many peder seed? TION REGISTE will be deposited up	class of certified seed? NO Generations of production ERED				
13. CHECK BOX BELOW FOR EACH ATT X 13A. Exhibit A, Origin and B X 13B. Exhibit B, Botanical D X 13C. Exhibit C, Objective De X 13C. Exhibit D, Data Indicate X 13E. Exhibit E, Statement of 14A. Does the applicant(s) specify (See Section 83(a), (If "Yes," 14B. Does the applicant(s) specify limited as to number of general The applicant declares that a viab	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty the Basis of Applicant that seed of this variety answer 14B and 14C be that this variety be tions? YES NO Le sample of basic seed eplenished periodically this sexually-reproduce	's Ownership be sold by varielow.) 14C. If "Yes," beyond bre FOUNDA of this variety vin accordance w	ety name only as a YES to 14B, how many peder seed? TION REGISTE will be deposited up ith such regulations riety believes that	class of certified seed? NO generations of production ERED				
13. CHECK BOX BELOW FOR EACH ATT X 13A. Exhibit A, Origin and B X 13B. Exhibit B, Botanical D X 13C. Exhibit C, Objective De X 13C. Exhibit D, Data Indicate X 13E. Exhibit E, Statement of 14A. Does the applicant(s) specify (See Section 83(a), (If "Yes," 14B. Does the applicant(s) specify limited as to number of general The applicant declares that a viab ance of a certificate and will be reserved. The undersigned applicant(s) of uniform, and stable as required it	ACHMENT SUBMITTED: Breeding History of the escription of the Variet escription of the Variet tive of Novelty The Basis of Applicant that seed of this variety answer 14B and 14C be that this variety be tions? YES NO The sample of basic seed eplenished periodically this sexually-reproduce in Section 41 and is entited.	's Ownership be sold by varielow.) 14c. If "Yes," beyond bre Foundaries of this variety vari	ety name only as a YES TO 14B, how many peder seed? TION REGISTE Will be deposited upith such regulations riety believes that in under the provision	class of certified seed? NO generations of production ERED CERTIFIED pon request before issu- s as may be applicable. the variety is distinct, ons of Section 42 of the				

(SIGNATURE OF APPLICANT)

CFS 2000

"Exhibit A"

Origin and Breeding History of the Variety

- 1. 'CFS 2000' originated in Iowa from a hand pollinated cross between 'C1426' * 'Amsoy Phyt. 4'. The crossing was accomplished in 1968. The F1, F2, and F4 generations were advanced in a Puerto Rico winter nursery. The F3 Generation and F5 plant rows were grown in Iowa. Early generations were advanced by single seed descent. CFS 2000 was F4 derived. It was yield tested in 1971 through 1974.
- 2. In 1972 single plants were selected and grown in plant rows in 1973. Only the rows conforming to a standard type were harvested and bulked. The genetic makeup of the variety was stabilized in the seventh generation.

CFS 2000

"Exhibit B"

Botancial Description of the Variety

'CFS 2000' is a northern, indeterminate soybean variety of Group II. It matures 3 days later than Corsoy in Iowa. It adapts very well to areas of the Midwest where Corsoy and Amsoy 71 are grown.

CFS 2000 has purple flowers and gray pubescence. The seed is yellow in color and has a yellow hilum.

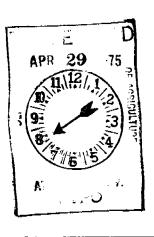
CFS 2000 is resistant to Phytophthora Root Rot (Races 1 and 2).

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.





INSTRUCTIONS: See Reverse. SOYBEAN (GLYCI	NE MAX)
AGRIPRO, INC.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Coile)	750081
P. O. Box 1668	VARIETY NAME OF TEMPORARY
Ames, Iowa 50010	DESIGNATION
Place the appropriate number that describes the varietal characters. SEED SHAPE:	CFS 2000
1. SEED SHAPE:	of this variety in the boxes below.
1 1 = SPHERICAL 2 = SPHERICAL 3 = ELONGATE 2. SEED COAT COLOR:	4 = OTHER (Specify)
T leveller o	'SHADE:
5 = OTHER (Specify)	4 = BLACK 2 1 = LIGHT 2 = MEDIUM 3 = DA
3. SEED COAT LUSTER: 4	SEED SIZE
2 I = DULL 2 = SHINY	G GRAMS PER 100 SEEDS
5. HILUM COLOR.	<u></u>
2 1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5	SHADE:
6 = BLACK 7 = OTHER (Specity)	BLACK 2 1 = LIGHT 2 = MEDIUM 3 = DA
	EAFLET SIZE (See Reverse):
1 1 YELLOW 2 - GREEN	l=small 2=medium 3=Large
8. LEAFLET SHAPE:	- TANGE
1 1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLI	PTICAL 5 = OTHER (Specify)
9. LEAF COLOR (See reverse):	10. FLOWER COLOR:
2 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREE	
11. POD COLOR: 12: 1	POD SET:
2 l= TAN 2 = BROWN 3 = BLACK	1 = SCATTERED 2 = CONCENTRATED
3. PLANT PUBESCENCE COLOR:	SHADE:
1 = GRAY 2 = BROWN 3 = OTHER (Specify) 4. PLANT TYPES (See Reverse):	1 = LIGHT 2 = MEDIUM 3 = DAF
15. P	LANT HABIT:
12	1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER (Specify)
MYPOCOTYL COLOR	EED PROTEIN:
1 = GREEN 2 = PURPLE	1 = A 2 = B
NUMBER OF DAYS TO FLOWERING 19. MATURITY GROUP:	
lys are 9 or less.) [] when 1 = 00 2 = 0	3 = 1
	8 = vi 9 = vii 10 ≈ viii
). SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Grow (e.g. [0 2]) when size is 9 mm. of less.)	th Chamber) AT 25° C. (Place a zero in first box
OF COTYLEDON	MM. WIDTH Emergence
DISEASE: (Enter 0 Not Tested; 1 Susceptible; 2 Resistant)	Score = 5
D BACTERIAL O SOYBEAN O DOWNY O PURP	O POD AND O ROOT
FROGEYE 0 STEM 2 PHYTORACE BROWN	TARGET CO
BLIGHT 0 WILDFIRE 0 RHIZOCTONIA 0 OTHER	R (Specify)

CFS 2000

"Exhibit E"

Statement of Applicant's Ownership

AGRIPRO, INC. purchased Improved Variety Research and their genetic material in 1973. Their records show and AGRIPRO believes they were the original and first breeder of 'CFS 2000' variety of soybeans for which we are soliciting a certificate of protection.

See attached.



UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

Grain Division 6525 Belorest Road Hyattsville, Maryland 20782 nec. 5/28/76

MAY 20 1976

Subject:

Seed Sample of Protected Variety Certificate No. 75000%

Kind and Variety - Soubean - CFS 2000 Breeder - Agripro, INC.

National Seed Storage Laboratory

Fort Collins, CO 80521

Attached is the above-identified sample and an Objective Description of Variety from in accordance with our Memorandum of Understanding and as agreed upon during my visit with Dr. Louis Bass on June 12, 1972.

One copy of this duplicate form showing the result of your germination test on 100 seeds of pure seed of this sample should be returned to this Office. Return of the duplicate form will serve as acknowledgement of receipt of the sample.

Germination:

96%

Date: 10/14/76

Commissioner

Plant Variety Protection Office, Grain Division

Attachment

In duplicate

91787

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY		
Plant shape	Amsoy 71	Petiole angle	Amsoy 71		
Leaf shape	Amsoy 71	Seed size	Marshall		
Lest color	Amsov 71	Seed shape	Amsoy 71		
Leef surface	Amsov 71	Seedling pigmentation	Amsov 71		

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY		LODGING PLANT SCORE HEIGHT	PLANT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER	IODINE NO.
			Width	Length	Protein	Oil	PLANT	IODINE NO.	
Submitted	118	2:2	39				%		
Name of similar variety Amsoy 71	120	2.5	41						

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

- 1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
- 2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
- 3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR VARIETY
Light Green "Ada"
Medium Green "Wilkin"
Dark Green "Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE VARIETY

Small "Amsoy"

Medium "Bonus"

Large "Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE VARIETY

Slender ''Vansoy''

Intermediate ''Wirth''

Bushy ''Adelphia''



Insproved Variety Research, Inc.

Natry H. Stine Rt. 3: Adol: Iowa 50003

Date McCubbin
ht. 5, Marchalltown, Iowa 50158
Vice President

7500081

Willard C. Latham Alexander, Jowa 50420 Secretary, Tryssurer

Harold A. Folkerts Rt. 2. Allison, Iowa 50602 Director, Equipment Design

To whom it may concern:

This is to inform you that as of June 1, 1973, the following assets of Improved Variety Research, Inc. have been purchased by Agripro, Inc., according to the terms of a contract:

- 1. All soybean seed and genetic and research materials, processes and formulae owned, used or developed by IVR wherever situated, whether in the form of seed stocks, growing plants, or genetic materials.
- 2. All records and memoranda used or maintained in connection with breeding, testing, increasing or any other phase of the soybean seed breeding program.
- 3. All contracts, agreements, longer and rights in connection with breeding, increasing, testing, marketing and producing soybean seed strains, varieties or brands, including variety protection rights.
- 4. All equipment, supplies, and materials including tractors, trucks, planters, cultivators, threshers, seed bags, office equipment.
- 5. The brand or trade name IWR and its good will.

Sinterely,

Willow C. Latton

Willard C. Labham, Socretary-Treasurer Improved Variety Research, Inc.